

FOURTEEN ADDITIONS TO THE KNOWN STRANDED SEEDS AND FRUITS OF NORTHWEST FLORIDA BEACHES

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ABSTRACT

Disseminules from the following fourteen plants are reported as additions to those previously documented from beaches of Santa Rosa Island, Florida: *Astrocaryum* sp., *Canavalia rosea*, *Carya glabra*, *Corylus* sp., *Crescentia cujete*, *Crinum americanum*, *Dioclea reflexa*, *Entada gigas*, *Manicaria saccifera*, *Mucuna sloanei*, *Nyssa aquatica*, *Rhizophora mangle*, *Spondias mombin*, and *Terminalia catappa*.

In a recent study Gunn and Dennis (1973) inventoried the stranded seeds and fruits (collectively called disseminules or propagules) found on eleven different beaches from Brazos Island near Brownsville, Texas, eastward to Santa Rosa Island near Pensacola, Florida. Their list included the following eight species whose disseminules were collected along beaches of Santa Rosa Island: (1) *Caesalpinia bonduc* (L.) Roxb., (2) *Carya aquatica* (Michx. f.) Nutt., (3) *Hippomane mancinella* L., (4) *Juglans cinerea* L., (5) *Juglans nigra* L., (6) *Mucuna urens* (L.) Medic., (7) *Quercus lyrata* Walt., and (8) *Taxodium distichum* (L.) Rich. Disseminules from species (2), (4), (5), (7), and (8) are of local or more northerly temperate origin and have probably been transported down the Escambia River and/or the Mississippi River. The other three disseminules are from tropical species which occur in South America, Africa, the Caribbean, or even in south Florida, and have been transported by various ocean currents into the Gulf of Mexico (Gunn 1968; Dennis and Gunn 1972; Gunn and Dennis 1972, 1973, 1976).

For the past several years we have been collecting and examining drift seeds and other stranded disseminules from the beaches of western Santa Rosa Island near Pensacola Beach, Florida. All of the eight disseminules reported by Gunn and Dennis (1973) and listed above have been collected during our field trips. In addition, we are reporting here the discovery of disseminules from the following fourteen plants which have not previously been recorded for Santa Rosa Island beaches: *Astrocaryum* sp., *Canavalia*

TABLE 1. Stranded seeds and fruits from Santa Rosa Island near Pensacola Beach, Florida.

Scientific Name	Place of Origin	
	Local or Northern	Tropical
<i>Astrocaryum</i> sp.		Tropical America, West Indies
<i>Caesalpinia bonduc</i> *		Southeast Asia, Pantropical
<i>Canavalia rosea</i>		Pantropical, South Florida, Texas
<i>Carya aquatica</i> *	X	
<i>Carya glabra</i>	X	
<i>Corylus</i> sp.	X	
<i>Crescentia cujete</i>		New World Tropics, South Florida
<i>Crinum americanum</i>	X	
<i>Dioclea reflexa</i>		Pantropical
<i>Entada gigas</i>		Pantropical
<i>Hippomane mancinella</i> *		Caribbean Islands, C. & S. America, South Florida
<i>Juglans cinerea</i> *	X	
<i>Juglans nigra</i> *	X	
<i>Manicaria saccifera</i>		American Tropics
<i>Mucuna sloanei</i>		New World Tropics, South Florida
<i>Mucuna urens</i> *		New World Tropics
<i>Nyssa aquatica</i>	X	
<i>Quercus lyrata</i> *	X	
<i>Rhizophora mangle</i>		New World Tropics, Africa, South Florida
<i>Spondias mombin</i>		New World Tropics
<i>Taxodium distichum</i> *	X	
<i>Terminalia catappa</i>		Tropical Asia

*Also reported from Santa Rosa Island by Gunn and Dennis (1973).

rosea (Sw.) DC., *Carya glabra* (Mill.) Sweet, *Corylus* sp., *Crescentia cujete* L., *Crinum americanum* L., *Dioclea reflexa* Hook. f., *Entada gigas* (L.) F. & R., *Manicaria saccifera* Gaertn., *Mucuna sloanei* F. & R., *Nyssa aquatica* L., *Rhizophora mangle* L., *Spondias mombin* L., and *Terminalia catappa* L.

Disseminules from *Corylus* are of northern temperate origin (this plant grows no farther south than central Alabama (Brockman 1968; Dean 1968; Clark 1971) and were probably transported via the Mississippi River.

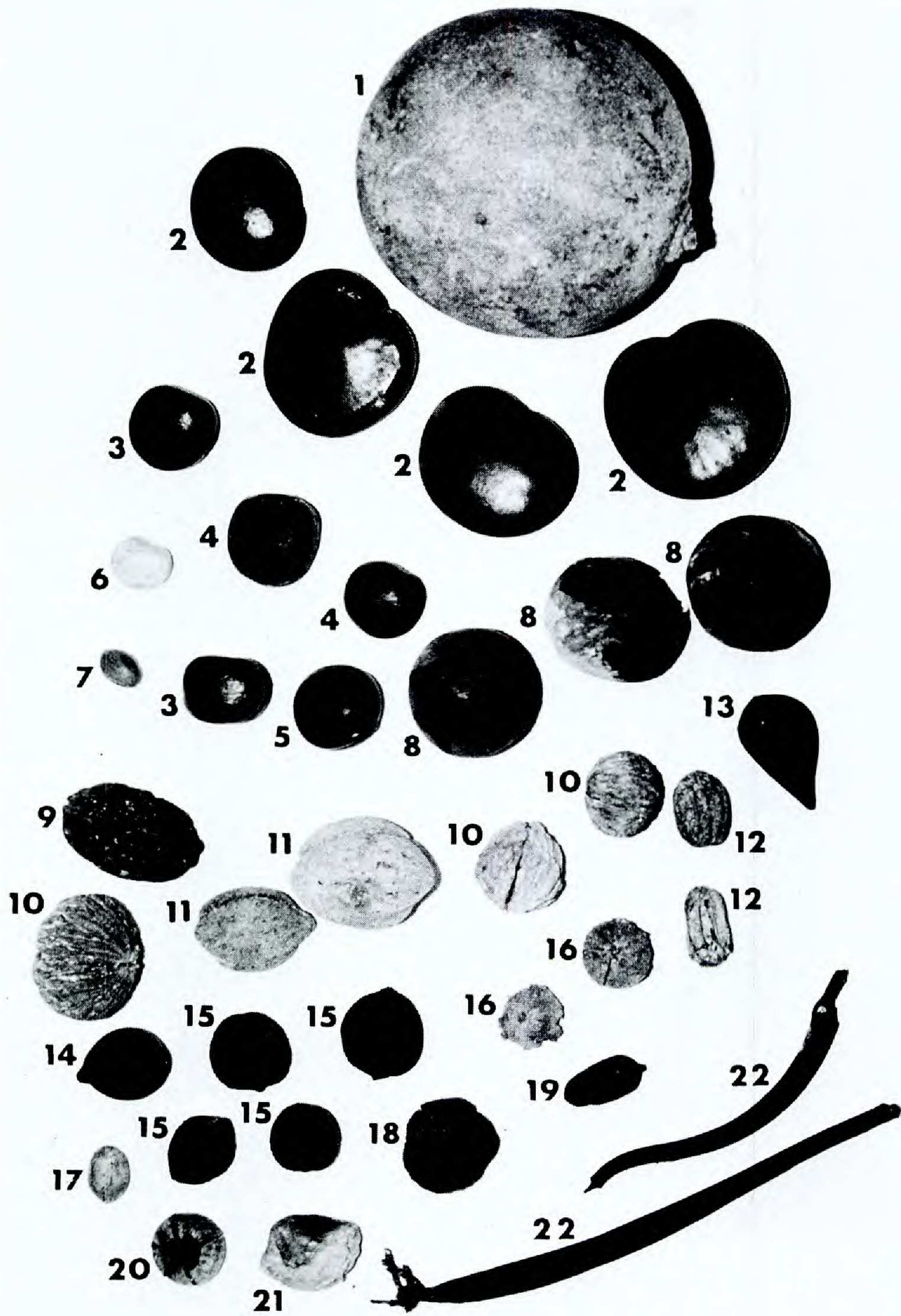


FIG. 1. Stranded disseminules from Santa Rosa Island near Pensacola Beach, Florida. 1 = *Crescentia cujete*, 2 = *Entada gigas*, 3 = *Dioclea reflexa*, 4 = *Mucuna sloanei*, 5 = *Mucuna urens*, 6 = *Caesalpinia bonduc*, 7 = *Canavalia rosea*, 8 = *Manicaria saccifera*, 9 = *Juglans cinerea*, 10 = *Juglans nigra*, 11 = *Terminalia catappa*, 12 = *Spondias mombin*, 13 = *Astrocaryum* sp., 14 = *Carya glabra*, 15 = *Carya aquatica*, 16 = *Hippomane mancinella*, 17 = *Corylus* sp., 18 = *Taxodium distichum*, 19 = *Nyssa aquatica*, 20 = *Quercus lyrata*, 21 = *Crinum americanum*, 22 = *Rhizophora mangle*.

Crinum americanum is of local occurrence and its seeds were probably transported down the Escambia River, along which this plant grows abundantly, or may have come from other Gulf coast states, since *Crinum* grows as far west as Texas (Godfrey and Wooten 1979). Trees of *Nyssa aquatica* and *Carya glabra* also occur in the Escambia River drainage area, and fruits from these species probably originated there, but they may also have been transported via the Mississippi River or have come from coastal states along the Atlantic seaboard west to Texas (Elias 1980). Seeds of *Canavalia rosea* may have originated in the tropics (Sauer 1964) or may have been transported from south Florida (Long and Lakela 1976) or from Texas, where this species also grows along the coast (Correll and Johnston 1970). Similarly, seeds of *Mucuna sloanei* and fruits of *Crescentia cujete* may be of tropical origin (Gunn and Dennis 1976) or may have originated from south Florida (Long and Lakela 1976). *Rhizophora mangle* is a native tree of south Florida (Davis 1940; Gore 1977) and its propagules may have originated there or may have come from various tropical areas where this species also occurs (Gunn and Dennis 1976). The other disseminules newly reported here are of strictly tropical origin (Gunn and Dennis 1976) and have been transported from a number of different possible locations (see Table 1).

Figure 1 shows all stranded disseminules mentioned in this article. They have been deposited into the seed collection of the Herbarium of the University of West Florida (UWFP) for permanent curation.

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